#(3

SEQUENCE LISTING

<110> Jack, William E.
      Schildkraut, Ira
      Menin, Julie F.
      Greenough, Lucia

<120> Use of Site-Specific Nicking Endonucleases to Create
      Single-Stranded Regions And Applications Thereof

<130> NEB-180

<140> 09/738,444
<141> 2000-12-15

<160> 51

<170> PatentIn Ver. 2.0

<210> 1
<211> 40
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 1
aaatcaatct aaagtatata ccggtaaact tggtctgaca   40

<210> 2
<211> 38
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 2
ctagcattag tcagactcta cattcaaata tgtatccg   38

<210> 3
<211> 38
<212> DNA
<213> Unknown

1

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 3
gcgctcgatg tcagactcga gcaaaaggcc agcaaaag   38

<210> 4
<211> 56
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 4
gagtccgatt gacctaagcg gatactctga cgactcgtag aaaagatcaa aggatc   56

<210> 5
<211> 51
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 5
gagtctcaga ctatctggag cgactgactc aaacttggtc tgacagttac c   51

<210> 6
<211> 40
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 6
gtaaatatcg gactctacaa tcaaatatgt atccgctcat   40

<210> 7
<211> 82
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 7
gatcgagtct gacatcgagc gcctagcatt agtcagactc gatatcgagt ctcagcctgt 60
tagcgatggt acatgacgac tc   82

<210> 8
<211> 82
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 8
ctaggagtcg tcatgtacca tcgctaacag gctgagactc gatatcgagt ctgactaatg 60
ctaggcgctc gatgtcagac tc   82

<210> 9
<211> 22
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 9
catgtctaga ctgcagagat ct   22

<210> 10
<211> 18
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 10
agatctctgc agtctaga   18

<210> 11
<211> 21
<212> DNA

3

<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 11
tacattcaaa tatgtatccg c   21

<210> 12
<211> 21
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 12
taaacttggt ctgacagtta c   21

<210> 13
<211> 54
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 13
gagtatccgc ttaggtcaat cggactcgga ccggatatca catgtgagtc gtca   54

<210> 14
<211> 54
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
      oligonucleotide

<400> 14
cctgttagcg atggtacatg acgactcaca tgtgatatcc ggtccgagtc cgat   54

<210> 15
<211> 10
<212> DNA

4

<213> N.BstNBI Recognition Sequence

<220>
<223> N indicates any base (subject to the normal rules
      of base pairing between the strands).

<400> 15
gagtcnnnnn   10

<210> 16
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 16
gcgtctaaac ccagatgt   18

<210> 17
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 17
gcgttcaaac ccagatgt   18

<210> 18
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 18
agctgttcta agccgcaa   18

<210> 19
<211> 18
<212> DNA

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 19
tgtgaacacc tcgtaacg                                                    18


<210> 20
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 20
ttcccaagca catgggat                                                    18


<210> 21
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 21
tctccaagca cagtgagt                                                    18


<210> 22
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequences - all randomly generated

<400> 22
tgactcaagc gagtactc                                                    18


<210> 23
<211> 18
<212> DNA
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
        sequences - all randomly generated

<400> 23
tgactcaagc ggatactc   18

<210> 24
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
        sequences - all randomly generated

<400> 24
tgacctaagc ggatactc   18

<210> 25
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
        sequence - randomly generated

<400> 25
actgagcgcc atgcatta   18

<210> 26
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
        sequence - randomly generated

<400> 26
actgagcgcc agtcatta   18

<210> 27
<211> 18
<212> DNA

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 27
atcgagcgcc atgcatta   18

<210> 28
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 28
atcgagcgcc tagcatta   18

<210> 29
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 29
tgtaccatcg ctaacagg   18

<210> 30
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - implemented via the synthetic
      oligonucleotide, but never existed as independent
      entity

<400> 30
gagtctgaca tcgagcgcct agcattagtc agactc   36

<210> 31

8

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<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:  Theoretical
      sequence - implemented via the synthetic
      oligonucleotide, but never existed as independent
      entity.

<400> 31
gagtccgatt gacctaagcg gatactctga cgactc                              36


<210> 32
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - implemented via the synthetic
      oligonucleotide, but never existed as independent
      entity

<400> 32
gagtctcagc ctgttagcga tggtacatga cgactc                              36


<210> 33
<211> 50
<212> DNA
<213> synthetic oligonucleotide

<220>
<223> N/A

<400> 33
gagtcagctc aatgttgcca gtcaggactc gtagaaaaga tcaaaggatc              50


<210> 34
<211> 35
<212> DNA
<213> synthetic oligonucleotide

<220>
<223> N/A

<400> 34
gggccacgta gactcgagca aaaggccagc aaaag                              35
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<210> 35
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 35
gtagttacgc ca                                                      12


<210> 36
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 36
caatgttgcc ag                                                      12


<210> 37
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 37
tctcaatgag gc                                                      12


<210> 38
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 38
agcgagcctt ta                                                      12
```

10

```
<210> 39
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 39
tgatcgagac ct                                                    12


<210> 40
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 40
tctgcggata ac                                                    12


<210> 41
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 41
tatgcagcgc at                                                    12


<210> 42
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 42
gatcgaacgt tc                                                    12
```

```
<210> 43
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 43
aaatttgggc cc                                                    12


<210> 44
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 44
actatctgga gc                                                    12


<210> 45
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 45
aggcgacatt tc                                                    12


<210> 46
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - randomly generated

<400> 46
atttacgggc ca                                                    12
```

```
<210> 47
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Theoretical
      sequence - implemented via the synthetic
      oligonucleotide, but never existed as independent
      entity.

<400> 47
gagtcagctc aatgttgcca gtcaggactc                                    30


<210> 48
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Theoretical
      sequence - implemented via the synthetic
      oligonucleotide, but never existed as independent
      entity.

<400> 48
gagtccgata tttacgggcc acgtagactc                                    30


<210> 49
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Theoretical
      sequence - implemented via the synthetic
      oligonucleotide, but never existed as independent
      entity.

<400> 49
gagtctcaga ctatctggag cgactgactc                                    30


<210> 50
<211> 48
<212> DNA
<213> Unknown
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<220>
<223> Description of Unknown Organism: Synthetic
       Oligonucleotide

<400> 50
ctggcaacat tgatcggact cggaccggat atcacatgtg agtcgtca   48

<210> 51
<211> 48
<212> DNA
<213> Unknown

<220>
<223> Description of Unknown Organism: Synthetic
       Oligonucleotide

<400> 51
gctccagata gttgacgact cacatgtgat atccggtccg agtccgat   48